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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,432	08/20/2001	Miguel A. Capote	031862-038	9508
20529	7590	01/28/2005	EXAMINER	
NATH & ASSOCIATES 1030 15th STREET, NW 6TH FLOOR WASHINGTON, DC 20005			GRAYBILL, DAVID E	
			ART UNIT	PAPER NUMBER
			2822	

DATE MAILED: 01/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/935,432

Applicant(s)

CAPOTE ET AL.

Examiner

David E Graybill

Art Unit

2822

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-14, 19 and 21-38 is/are pending in the application.
- 4a) Of the above claim(s) 7-14, 19 and 23-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Applicant's election with traverse of the species of Figure 11 in the reply filed on 7-8-4 is acknowledged. The traversal is on the grounds that "the Examiner has not met the burden of providing 'an appropriate explanation' as to the existence of a 'serious burden' if a restriction were not required."

This is not found persuasive for the following reasons:

The following is a quotation of MPEP 808.01:

Where the inventions claimed are independent, i.e., where they are not connected in design, operation, or effect under the disclosure of the particular application under consideration (MPEP § 806.04), the facts relied on for this conclusion are in essence the reasons for insisting upon restriction. This situation, except for species, is but rarely presented, since persons will seldom file an application containing disclosures of independent things.

The following is a quotation of MPEP 808.01(a):

Where there is no disclosure of relationship between species (see MPEP § 806.04(b)), they are independent inventions and election of one invention following a requirement for restriction is mandatory even though applicant disagrees with the examiner. There must be a patentable difference between the species as claimed. See MPEP § 806.04(h). Since the claims are directed to independent inventions, restriction is proper pursuant to 35 U.S.C. 121, and it is not necessary to show a separate status in the art or separate classification.

Therefore, since the claims are directed to independent species, restriction is proper pursuant to 35 U.S.C. 121, and it is not necessary to provide additional explanation as to the existence of a serious burden if a restriction were not required.

The traversal is also on the ground that, "the Examiner has already searched the listed species and provided an Office Action on the merits therefor."

This is not found persuasive because a restriction requirement is not improper between inventions previously examined on the merits. Indeed, both 37 CFR § 1.142(a) and 811.02 explicitly state that a restriction may be made at any time before final action:

1.142 Requirement for restriction.

(a) If two or more independent and distinct inventions are claimed in a single application, the examiner in an Office action will require the applicant in the reply to that action to elect an invention to which the claims will be restricted, this official action being called a requirement for restriction (also known as a requirement for division). Such requirement will normally be made before any action on the merits; however, it may be made at any time before final action.

811.02 Even After Compliance With Preceding Requirement.

Since § 37 CFR 1.142(a) provides that restriction is proper at any stage of prosecution up to final action, a second requirement may be made when it becomes proper, even though there was a prior requirement with which applicant complied. *Ex parte Benke*, 1904 C.D. 63, 108 O.G. 1588 (Comm'r Pat. 1904).

The traversal additionally appears to be on the ground that there must be a serious burden if restriction is not required and, allegedly, the previous examination of the restricted species is evidence that there is no serious burden.

This is not found persuasive because there is a serious burden if restriction of the species is not required, and this serious burden is sufficiently shown in the requirement for restriction as elucidated *supra*. Although, to continue to afford applicant the benefit of compact prosecution, restriction was not initially required and a serious burden was incurred in the initial examination of the species. However, the serious burden remains,

and the right to require restriction at any time before final action is herein exercised.

Applicant further traverses the requirement for restriction because, "at the Examiner's disposal are powerful electronic search engines," "the overlapping subject matter and classifications," and, "applicants have paid a filing fee for an examination of all the claims in this application."

These are not found persuasive because they are irrelevant to the determination of the propriety of the requirement for restriction.

For at least these reasons, and because the reasons for insisting on restriction as stated in MPEP 808 have been clearly met, the requirement is still deemed proper and is therefore made FINAL.

Also, applicant's indication that claims 7-8, 10-11, 19 and 23-38 are readable on the species of Figure 11, and claims 19, 22, 23 and 31 are generic and/or linking, is respectfully deemed incorrect. Rather, claims 21 and 22 are readable on the species of Figure 11, and claims 21 and 22 are each generic only to both of the species of Figures 10 and 11.

To further clarify:

Claim 19 is not readable on the species of Figure 11 at least because the scope of claim 19 is limited to a substrate having discrete solder bumps thereon before placing the chip.

Claims 23-38 are not readable on the species of Figure 11 at least because the scope of claims 23-38 is limited to a layer of the second portion encapsulant at least between the solder-filled holes and the semiconductor chip.

Claims 7-14, 19 and 23-38 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 7-8-4.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 21 is rejected under 35 U.S.C. 102(b) as being anticipated by Akhavain (5341564).

At column 2, line 66 to column 5, line 7, Akhavain discloses a method for making an electrical component assembly, comprising, in sequence, the steps of: laminating a film 12e on an active surface of an semiconductor chip 11a having discrete solder bumps 11c thereon; coating one of the film or a substrate 12b with a portion of an encapsulant 12e; placing the semiconductor chip on the substrate with the film and encapsulant portion

located between the semiconductor chip and the substrate; curing the encapsulant portion; and reflowing the solder bumps in order to attach the semiconductor chip to the substrate.

To further clarify the disclosure of the preambular limitation, "in sequence, the steps of," it is noted that Akhavain discloses the steps in the sequence of Akhavain. In the interest of compact prosecution, it is further noted that the language, "in sequence, the steps of," does not limit the scope of the claims to any particular sequence of the claim steps, including the particular order of succession of the printed claim steps.

Claim 22 is rejected under 35 U.S.C. 102(b) as being anticipated by Gutierrez (5371328).

At column 5, line 24 to column 6, line 17, Gutierrez teaches a method for making an electrical component assembly, comprising, in sequence (the sequence of Gutierrez), the steps of: laminating a film 9 on an active surface of a semiconductor chip 1 having discrete solder bumps 5 thereon; coating the film with a portion of an encapsulant 11; placing the semiconductor chip on the substrate 3 with the film and encapsulant portion located between the semiconductor chip and the substrate; curing the encapsulant portion; and reflowing the solder bumps in order to attach the integrated circuit chip to the substrate.

Applicant's amendment and remarks filed 4-2-4, 7-8-4 and 10-27-4 have been fully considered and are adequately addressed by the rejections *supra*.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

For information on the status of this application applicant should check PAIR: Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alternatively, applicant may contact the File Information Unit at (703) 308-2733. Telephone status inquiries should not be directed to the examiner. See MPEP 1730VIC, MPEP 203.08 and MPEP 102.

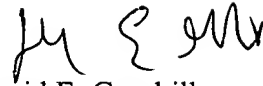
Any other telephone inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Graybill at (571) 272-1930. Regular office hours: Monday through Friday, 8:30 a.m. to 6:00 p.m.

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The fax phone number for group 2800 is (703) 872-9306.

A handwritten signature in black ink, appearing to read 'David E. Graybill', with a stylized flourish at the end.

David E. Graybill
Primary Examiner
Art Unit 2827

D.G.

21-Jan-05